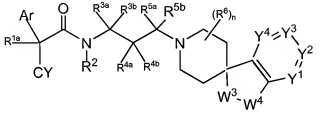
IN THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

Claims 1-32. (Cancelled).

Claim 33. (Currently Amended) A compound of structural formula I-1:



[I-1]

or a pharmaceutically acceptable salt thereof,

wherein:

R^{1a} is selected from: hydrogen, hydroxyl, and optionally halogen-substituted lower alkyl;

R^2 is optionally halogen-substituted lower alkyl;

~~R^2~~, R^{3a}, R^{3b}, R^{5a} and R^{5b} are each independently selected from: hydrogen and optionally halogen-substituted lower alkyl;

R^{4a} and R^{4b} are each independently selected from: hydrogen, halogen, hydroxyl, and optionally halogen-substituted lower alkyl;

each R^6 is independently selected from: hydrogen, halogen and optionally halogen-substituted lower alkyl;

n is selected from an integer between 1 and 8;

W^3 is –O–,

W^4 is $–CH_2–$,

CY is cyclopentane ring, cyclohexane ring, prrolidine ring, morpholine ring, piperazine ring, pyperidine ring, benzene ring, dihydropyridine ring, pyridine ring, pyrazine ring, pyrimidine ring, pyrrole ring, pyrazole ring, imidazole ring, triazole ring, tetrazole ring, oxazole ring, oxadiazole ring, oxazolidine ring and thiazole ring ~~cyclopentane ring, a pyrrolidine ring, a piperazine ring, a piperidine ring, a benzene ring, a pyridine ring, a pyrazine ring, a pyrrole ring, a pyrazole ring, an imidazole ring, a triazole ring, a tetrazole ring, an oxazolidine ring, or a thiazole ring~~; which is optionally substituted with two or more substituents selected from Group α,

Y^1, Y^2, Y^3 and Y^4 are each independently selected from: –CH–, –CF–, $-C(NHCOCH_3)-$, $-C(NHCOC_2H_5)-$ and –N–,

with the proviso that not all of Y^1 to Y^4 are simultaneously nitrogen atoms;

Ar is a benzene ring, a pyridine ring, a pyrazine ring or a pyrimidine ring, unsubstituted or substituted with one or two substituents selected from Group β:

each Group α is independently selected from: halogen, hydroxyl, amino, nitro, oxo, mono-lower alkylamino, di-lower alkylamino, optionally halogen-substituted lower alkyl, optionally fluorine-substituted lower alkyloxy, lower cycloalkyloxy, lower alkyloxycabonyl, (lower alkyloxycarbonyl)amino, (lower alkyloxycarbonyl) lower alkylamino, lower alkylcarbonyl, lower alkylcarbonyloxy, (lower alkylcarbonyl)amino, (lower alkylcarbonyl) lower alkylamino, carbamoyl, mono-lower alkylcarbamoyl, di-lower alkylcarbamoyl, carbamoylamino, mono-lower alkylcarbamoylamino, di-lower alkylcarbamoylamino, (mono-lower alkylcarbamoyl) lower alkylamino, (di-lower alkylcarbamoyl) lower alkylamino, carbamoyloxy, mono-lower alkylcarbamoyloxy, di-lower alkylcarbamoyloxy, lower alkylsulfonyl, lower alkylsulfonylamino, sulfamoyl, mono-lower alkylsulfamoyl, di-lower alkylsulfamoyl, sulfamoylamino, (mono-lower alkylsulfamoyl)amino, (di-lower alkylsulfamoyl)amino, (mono-lower alkylsulfamoyl) lower alkylamino and (di-lower alkylsulfamoyl) lower alkylamino; and

each Group β is independently selected from: nitro, aryloxy, lower cycloalkyl, lower cycloalkyloxy, lower alkylenedioxy, halogen, hydroxyl, optionally hydroxyl- or fluorine-substituted lower alkyl and optionally fluorine-substituted lower alkyloxy.

Claim 34. (Previously Presented) The compound according to Claim 33, wherein R^{1a} is hydrogen, methyl or hydroxyl; and pharmaceutically acceptable salts thereof.

Claim 35. (Cancelled).

Claim 36. (Previously Presented) The compound according to Claim 33, wherein both R^{3a} and R^{3b} are hydrogen atoms; and pharmaceutically acceptable salts thereof.

Claim 37. (Previously Presented) The compound according to Claim 33, wherein R^{4a} and R^{4b} are selected from the group consisting of hydrogen, fluorine and hydroxyl;
and pharmaceutically acceptable salts thereof.

Claim 38. (Previously Presented) The compound according to Claim 33, wherein R^{5a} and R^{5b} are hydrogen or methyl; and pharmaceutically acceptable salts thereof.

Claim 39. (Previously Presented) The compound according to Claim 33, wherein each R^6 is hydrogen; and pharmaceutically acceptable salts thereof.

Claims 40 and 41. (Cancelled).

Claim 42. (Previously Presented) The compound according to Claim 33, wherein CY is a substituent selected from the group consisting of phenyl, 4-fluorophenyl, 4-chlorophenyl, 3,4-difluorophenyl, 4-methoxyphenyl, 4-tolyl, 4-trifluoromethylphenyl, pyridinyl, pyridin-3-yl, pyrazinyl, pyrimidinyl, 6-fluoropyridin-3-yl, 2-fluoropyridin-4-yl, 6-trifluoromethylpyridin-3-yl, 6-methoxypyridin-3-yl, pyrrol-1-yl, pyrazolyl, imidazolyl, 2-methylimidazolyl, 4-methylimidazolyl, 1,2,3-triazol-1-yl, 4-methyl-1,2,3-triazol-1-yl, 1,2,4-triazol-1-yl, 1,2,3,4-tetrazol-1-yl, 1,2,3,4-tetrazol-2-yl, thiazolyl, pyrrolidin-1-yl, piperidinyl, 2-piperidon-1-yl, 2-pyridon-1-yl, 2-pyrrolidon-1-yl, oxazolidin-2-on-1-yl, 4-methanesulfonyl-piperazin-2-on-1-yl, cyclohexyl and cyclopentyl; or a pharmaceutically acceptable salt thereof.

Claim 43. (Cancelled).

Claim 44. (Previously Presented) The compound according to Claim 33, wherein Ar is a substituent selected from the group consisting of phenyl, 4-fluorophenyl, 3,4-difluorophenyl, 4-chlorophenyl, 4-methoxyphenyl, 4-tolyl, 4-trifluoromethylphenyl, pyridinyl, 6-fluoropyridin-3-yl, 6-trifluoromethylpyridin-3-yl, and 6-methoxypyridin-3-yl;
and pharmaceutically acceptable salts thereof.

Claim 45. (Previously Amended) The compound according to Claim 33 selected from the group consisting of:

(1) 2-(3,4-difluorophenyl)-2-(2-oxo-1-pyrrolidinyl)-N-[3-(spiro[5- fluoroisobenzofuran-1(3H), 4'-piperidin]-1-yl)propyl]acetamide,

(2) 2-(3,4-difluorophenyl)-N-methyl-2-(1H-1,2,3-triazol-1-yl)-N- [3-(spiro [isobenzofuran-1(3H), 4'-piperidin]-1-yl)propyl]acetamide,

(3) 2-(3,4-difluorophenyl)-N-methyl-2-(2H-1,2,3,4-tetrazol-2-yl)- N-[3-(spiro[isobenzofuran-1(3H), 4'-piperidin]-1-yl)propyl]acetamide,

(4) 2-(3,4-difluorophenyl)-N-methyl-2-(2-oxo-1(2H)pyridinyl)-N- [3-(spiro[isobenzofuran-1(3H), 4'-piperidin]-1-yl)propyl]acetamide,

(5) 2-(3,4-difluorophenyl)-N-methyl-2-(2-oxo-1- pyrrolidinyl)-N- [3-(spiro[5-fluoroisobenzofuran-1(3H),4'-piperidin]-1-yl)propyl]-acetamide,

(6) 2-(3,4-difluorophenyl)-N-methyl-2-(2-methyl-1H-imidazol-1- yl)-N-[3-(spiro[6-fluoroisobenzofuran-1(3H),4'-piperidin]-1-yl)propyl]-acetamide,

(7) 2-(3,4-difluorophenyl)-N-methyl-2-(2-methyl-1H-imidazol-1- yl)-N-[3-(spiro[5-fluoro-6-azaisobenzofuran-1(3H),4'-piperidin]-1-yl)propyl]acetamide,

(8) 2,2-bis(6-fluoro-3-pyridinyl)-N-methyl-N-[3-(spiro[5-fluoro-6- azaisobenzofuran-1(3H),4'- piperidin]-1-yl)propyl]acetamide,

(9) 2-(3,4-difluorophenyl)-N-ethyl-2-(2-oxo-1-pyrrolidinyl)-N- [3-(spiro[isobenzofuran-1(3H),4'-piperidin]-1-yl)propyl]acetamide,

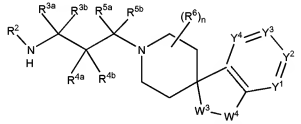
(10) 2-(3,4-difluorophenyl)-N-ethyl-2-(4-methanesulfonyl)-2-oxo- 1-piperazinyl)-N-[3-(spiro[6-fluoroisobenzofuran-1(3H),4'-piperidin]-1-yl)propyl]acetamide, and

or a pharmaceutically acceptable salt thereof.

Claims 46-52. (Cancelled).

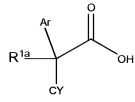
Claim 53. (Previously Presented) A method for producing a compound according to Claim 33 of general formula [I-1], which comprises:

(1) amidating a compound represented by a general formula [IIa]:



[IIa]

wherein R^2, R^{3a}, R^{3b}, R^{4a}, R^{4b}, R^{5a}, R^{5b}, R^6, Y^1, Y^2, Y^3, Y^4, W^3, W^4 and n are as in Claim 33, with a compound represented by a general formula (IIIa)



[IIIa]

wherein: Ar, R^{1a} and CY are as in Claim 33.

Claims 54-57. (Cancelled).

Claim 58. (Previously Presented) The compound according to Claim 57 selected from the group consisting of:

(1) 2-(4-fluorophenyl)-N-methyl-2-(2-oxo-1-pyrrolidinyl)-N-[3- (spiro[6-azaisobenzofuran-1(3H), 4'-piperidin]-1-yl)propyl]acetamide,

(2) 2-(3,4-difluorophenyl)-N-methyl-2-(2-oxo-1-pyrrolidinyl)-N- [3-(spiro[5-fluoro-6-azaisobenzofuran-1(3H), 4'-piperidin]- 1-yl)propyl]acetamide,

(3) 2-(3,4-difluorophenyl)-N-methyl-2-(2-oxo-1-pyrrolidinyl)-N- [3-(spiro[6-fluoro-5-azaisobenzofuran-1(3H), 4'-piperidin]-1-yl)- propyl]acetamide,

(4) 2-(3,4-difuorophenyl)-N-methyl-2-(2-methyl-1H-imidazol-1- yl)-N-[3-(spiro[5-fluoro-6-azaisobenzofuran-1(3H),4'-piperidin]-1-yl)- propyl]acetamide,

(5) 2-(3,4-difluorophenyl)-2,2-dimethyl-N-methyl-N-[3-(spiro[5- fluoro-6-azaisobenzofuran-1(3H), 4'-piperidin]-1-yl)propyl]acetamide,

(6) 2-(3,4-difluorophenyl)-N-methyl-2-(1H-1,2,4-triazol-1-yl)-N- [3-(spiro[5-fluoro-6-azaisobenzofuran-1(3H),4'-piperidin]-1-yl)propyl]- acetamide,

(7) 2,2-bis(6-fluoro-3-pyridinyl)-N-methyl-N- [3-(spiro[5-fluoro-6-azaisobenzofuran-1(3H),4'-piperidin]-1-yl)propyl]- acetamide,

(8) N-methyl-2,2-bis(6-methoxy-3-pyridinyl)-N-[3-(spiro[5-fluoro- 6-azaisobenzofuran-1(3H), 4'-piperidin]-1-yl)propyl]acetamide,

(9) 2-(6-fluoro-3-pyridinyl)-2-(4-fluorophenyl)-N-methyl-N-[3- (spiro[5-fluoro-6-azaisobenzofuran-1(3H),4'-piperidin]-1-yl)propyl]- acetamide,

(10) 2-(6-fluoro-3-pyridinyl)-N-methyl-2-(6-trifluoromethyl-3- pyridinyl)-N-[3-(spiro[5-fluoro-6-azaisobenzofuran-1(3H), 4'-piperidin]-1-yl)propyl]acetamide,

(11) 2-(6-fluoro-3-pyridinyl)-2-(6-methoxy-3-pyridinyl)-N-methyl- N-[3-(spiro[5-fluoro-6-azaisobenzofuran-1(3H),4'-piperidin]-1-yl)- propyl]acetamide,

(12) 2-(6-fluoro-3-pyridinyl)-2-(4-toluyl)-N-methyl-N- [3-(spiro[5-fluoro-6-azaisobenzofuran-1(3H),4'-piperidin]-1-yl)propyl]- acetamide,

(13) 2-(6-fluoro-3-pyridinyl)-N-methyl-2-phenyl-N- [3-(spiro[5-fluoro-6-azaisobenzofuran-1(3H),4'-piperidin]-1-yl)propyl]- acetamide,

(14) 2,2-bis(4-fluorophenyl)-N-methyl-N-[3-(spiro[5-fluoro-6- azaisobenzofuran-1(3H), 4'-piperidin]-1-yl)propyl]acetamide,

(15) 2-(3,4-difluorophenyl)-N-methyl-2-(1H-pyrrol-1-yl)-N-[3-(spiro[5-fluoro-6-azaisobenzofuran-1(3H),4'-piperidin]-1-yl)propyl]- acetamide,

(16) 2-(4-fluorophenyl)-N-methyl-2-(1H-pyrrol-1-yl)-N-[3-(spiro[5- fluoro-6-azaisobenzofuran-1(3H), 4'-piperidin]-1-yl)propyl]acetamide,

(17) 2-(3,4-difluorophenyl)-N-methyl-2-(1H-pyrazol-1-yl)-N-[3- (spiro[5-fluoro-6-azaisobenzofuran-1(3H), 4'-piperidin]-1-yl)propyl]- acetamide,

(18) 2-(3,4-difluorophenyl)-N-methyl-2-(1H)-pyrrol-1-yl)-N-[3- (spiro[6-fluoro-5-azaisobenzofuran-1(3H),4'-piperidin]-1-yl)propyl]- acetamide,

(19) 2-(6-fluoro-3-pyridinyl)-2-(4-fluorophenyl)-N-methyl-N-[3 - (spiro[6-fluoro-5-azaisobenzofuran-1(3H),4-piperidin]-1-yl)propyl]- acetamide,

(20) 2-(6-fluoro-3-pyridinyl)-2-(4-fluorophenyl)-N-methyl-N-[3- (spiro[6-azaisobenzofuran-1(3H),4-piperidin]-1-yl)propyl]acetamide,

(21) 2,2-bis(6-fluoro-3-pyridinyl)-N-ethyl-N-[3-(spiro[5-fluoro-6- azaisobenzofuran-1(3H), 4'-piperidin]-1-yl)-propyl]acetamide,

(22) 2-(6-fluoro-3-pyridinyl)-2-(2,4-difluorophenyl)-2-hydroxy-N- methyl-N-[3-(spiro[6-fluoro-5-azaisobenzofuran-1(3H),4'-piperidin]-1-yl)propyl]acetamide,

(23) 2-(2,4-difluorophenyl)-2-(6-fluoro-3-pyridinyl)-2-hydroxy-N- methyl-N-[3-(spiro[6-azaisobenzofuran-1(3H), 4'-piperidin]- 1-yl)propyl]acetamide, or

(24) 2,2-bis(4-fluorophenyl)-2-hydroxy-N-methyl-N-[3-(spiro[5- fluoro-6-azaisobenzofuran-1(3H), 4'-piperidin]-1-yl)propyl]acetamide,

or a pharmaceutically acceptable salt thereof.

Claim 59. (Cancelled).